WHAT IS CLAIMED IS:

1. A method of manufacturing a semiconductor device, comprising the steps of:

(a) effecting exposure processing on a resist film on a first semiconductor substrate with first exposure energy; and

(b) correcting the first exposure energy with a first correction value when a drift of each of dimensions of resist patterns formed on the first semiconductor substrate from a target dimension is larger than a first value, correcting the first exposure energy with a second correction value smaller than the first correction value when the drift is smaller than the first value, and effecting exposure processing on a resist film on a second semiconductor substrate with the corrected exposure energy.

2. A method of manufacturing a semiconductor device, comprising the steps of:

(a) effecting exposure processing on a resist film on a first semiconductor substrate with first exposure energy; and

(b) correcting the first exposure energy with a first correction value when a drift of each of dimensions of resist patterns formed on a first semiconductor substrate from a target dimension is larger than a first

38

value, correcting the first exposure energy with a second correction value smaller than the first correction value when the drift is smaller than the first value and larger than a second value, effecting exposure processing on a resist film on a second semiconductor substrate with the corrected exposure energy, and effecting exposure processing on the resist film on the second semiconductor substrate with the first exposure energy when the drift is smaller than the second value.

3. A method of manufacturing a semiconductor device, comprising the steps of:

(a) effecting exposure processing on resist films on a plurality of semiconductor substrates with first exposure energy respectively; and

(b) correcting the first exposure energy with a first correction value when an average value of drifts of dimensions of resist patterns formed on the plurality of semiconductor substrates from a target dimension is larger than a first value, correcting the first exposure energy with a second correction value smaller than the first correction value when the average value of the drifts is smaller than the first value, and effecting exposure processing on a resist film on a semiconductor substrate different from the plurality of semiconductor substrates with the corrected exposure energy.

4. A method of manufacturing a semiconductor device, comprising the steps of:

(a) effecting exposure processing on resist films on a plurality of semiconductor substrates with first exposure energy respectively; and

(b) correcting the first exposure energy with a first correction value when an average value of drifts of dimensions of resist patterns formed on the plurality of semiconductor substrates from a target dimension is larger than a first value, correcting the first exposure energy with a second correction value smaller than the first correction value when the average value of the drifts is smaller than the first value and larger than a second value, effecting exposure processing on a resist film on a semiconductor substrate different from the plurality of semiconductor substrates with the corrected exposure energy, and effecting exposure processing on the resist film on the semiconductor substrate different from the plurality of semiconductor substrates with the first exposure energy when the average value of the drifts is smaller than the second value.

5. A method of manufacturing a semiconductor device, comprising the steps of:

(a) effecting exposure processing on resist films on a plurality of semiconductor substrates with first exposure energy respectively;

(b) detecting an average value of drifts of dimensions of resist patterns formed on the plurality of semiconductor substrates from a target dimension;

(c) correcting the first exposure energy with a first correction value when the average value of the drifts detected in said step (b) is larger than a first value, correcting the first exposure energy with a second correction value smaller than the first correction value when the average value of the drifts is smaller than the first value and larger than a second value, thereby setting the first exposure energy as second exposure energy, and setting the first exposure energy as second exposure energy without correcting the first exposure energy when the average value of the drifts is smaller than the second value;

(d) comparing the second exposure energy with third exposure energy to thereby determine whether the following exposure processing should be done; and

(e) effecting exposure processing on a resist film on a semiconductor substrate different from the plurality of semiconductor substrates with the second exposure energy according to the determination in said step (d).